10

15

20

WHAT WE CLAIM IS

- 1 A method of electroplating wherein a complex current waveform is passed between an anode and an object being electroplated.
 - 2. A method as claimed in claim 1 wherein the waveform is a cyclic alternating type having two portions, a positive portion including one or more spikes and a negative portion.
 - 3. A method as claimed in claim 1 wherein the waveform is a cyclic alternating type having two portions, a positive triangular shaped portion including one or more spikes and a negative portion.
 - 4. A method as claimed in claim 1 wherein the waveform is a cyclic alternating type having two portions, a positive triangular shaped portion having a peak value of substantially 5ASD, the forward portion including one or more spikes having peak values of substantially 11.25ASD, and a negative portion having a peak value of substantially 12ASD.

10

- 5. A method of electroplating an object including:
- providing a electroplating bath solution with one or more anodes therein,
- disposing an object to be electroplated in the bath, and

 passing a complex current waveform between the anode nodes

 and the object.
 - 6. A method as claimed in claim 5 wherein the waveform is a cyclic alternating type having two portions, a positive triangular shaped portion including one or more spikes and a negative portion.
- 7. A method as claimed in claim 5 wherein the waveform is a cyclic alternating type having two portions, a positive portion including one or more spikes and a negative portion, and the method further including vibrating the object and/or agitating the bath solution.
- 20 8. A method of electroplating an object including:
 - providing a electroplating bath solution with one or more anodes therein, $\begin{tabular}{ll} & & & \\ & & &$

disposing an object to be electroplated in the bath,

passing a complex current waveform between the anode nodes and the object, wherein the waveform is a cyclic alternating type having two portions, a positive triangular shaped portion having a peak value of substantially 5ASD, the forward portion including one or more spikes having peak values of substantially 11.25ASD, and a negative portion having a peak value of substantially 12ASD, and vibrating the object and/or agitating the bath solution.